

CLAIMS

What is claimed is:

1. A light-activated illuminating device comprising a support member and a phosphorescent material supported by the support member,

5 wherein the support member and the phosphorescent material are so formed to provide a luminescent image that has a varying luminescent effect after the phosphorescent material is exposed to a light source.

2. The device of claim 1 further comprising a light source adapted to emit a light of a uniform intensity.

10 3. The device of claim 2, wherein the light source emits a UV-LED light.

4. The device of claim 1, wherein
the support member comprises an enclosed container; and
the phosphorescent material is loosely held in the enclosed container and can
freely move therein;

15 whereby the luminescent image formed is variable in its pattern after the light source is removed.

5. The device of claim 3, wherein the container is half-filled with the phosphorescent material.

20 6. The device of claim 3, wherein the container is formed of a transparent vinyl material and comprises a pair of parallel wall members with a gap of 1/8 inch therebetween.

7. The device of claim 6, wherein at least one of the wall members can have a contoured shape.

8. The device of claim 1, wherein the support member comprises a sheet member divided into a plurality of sub-sections, at least two adjacent sub-sections of the sheet member being coated with different phosphorescent materials.

5 9. The device of claim 8, wherein the sub-sections of the sheet member are coated with phosphorescent materials having different phosphor concentrations, whereby the luminescent image formed has a varying illumination intensity.

10 10. The device of claim 8, wherein the sub-sections of the sheet member are coated with different phosphorescent materials, whereby the luminescent image formed has a varying color effect.

10 11. The device of claim 8, wherein each sub-section is marked to distinguish from an adjacent sub-section.

12. The device of claim 1, wherein the phosphorescent material comprises a strontium aluminate.

15 13. A toy kit comprising:
a first light-activated illuminating member comprising a support member and a phosphorescent material supported thereby; and
a light source adapted to activate the phosphorescent material;
wherein the phosphorescent material is adapted to form a luminescent image that has a varying luminescent effect.

20 14. The toy kit of claim 13, wherein
the support member comprises an enclosed container; and
the phosphorescent material is loosely held in the enclosed container and can freely move therein;
whereby the luminescent image formed is variable in its pattern after the light
25 source is removed.

15. The toy kit of claim 13 further comprising a second light-activated illuminating member, which forms a luminescent image having a different luminescent effect from that of the first illuminating member.

5 16. The toy kit of claim 13 further comprising a first cover member for shielding the phosphorescent material from undesired exposure to light.

17. The toy kit of claim 16, wherein the first cover member comprises a countered cut-out portion.

18. The toy kit of claim 16 further comprising a second cover member, wherein the second cover member is joined to the first cover member and movable in relation thereto.

10 19. The toy kit of claim 13, wherein the light source is a UV-LED pen.

20. The toy kit of claim 13 further comprising a plurality of tip adapters adapted to be mounted onto the light source to change the shape of light beams emitted from the light source.